Part I. ARMD ADMINISTRATIVE DATA:

1.   Services to be Furnished:

The matrix below indicates the general scope of ODIN services at each center in the Aeronautics Research Mission Directorate (ARMD.)   Unless specifically limited within this document, the scope of these services shall pertain to the full range and extent of services as described under the ODIN Master Contract, and the ODIN Contractor shall assume full responsibility for all facets of the delivery of these services. These services shall also be provided for employees who have ODIN supported equipment with them on travel, for telecommuting requirements, or otherwise checked out for off-Center use.

SERVICE CATEGORY	ARC	DFRC	GRC	LaRC
Desktop Seats	✓	✓	✓	✓
Laptop Seats	✓	✓	✓	✓
Networks	-	-	✓	✓
Cable Plant Management	-	-	✓	✓
Server Seats	✓	✓	✓	✓
Workstation Seats	✓	✓	✓	✓
Account Services Seat	✓	✓	✓	✓
LAN Seats	-	-	✓	✓
Phone Seats	✓	-	✓	✓
Pager Seats	✓	✓	✓	-
FAX Seats	✓-	✓	✓	✓
Local Video Seat	-	-	✓	✓
Admin Radio Seats	-	✓	✓	-
Remote Communication Seats	✓	-	✓	✓
PDA Seats/Mobile Computing Seats	✓	✓	✓	✓
PCell Seats	✓	✓	✓	✓

Legend: ✓ for those included in Center's scope of ODIN services
                  - for those not included in the Center's scope of ODIN services

ARC: Ames Research Center (ARC) Delivery Order will include seats for Contractors with Government Furnished Equipment (GFE). The Government will retain responsibility for the following functions: policy, NASA and Government standards, technical standards/ architectures, Center intrusion detection systems, and all security audits and penetration testing. The Government also considers strategic planning to be a partnership effort between the ODIN Contractor and the Center. NASA reserves the right to have final authority over strategic decisions.

DFRC: Dryden Flight Research Center (DFRC) intends to utilize the ODIN Delivery Order to procure various ODIN services as identified in the DFRC Price Model for both civil service and on-site contractor employees. These services shall also be provided to off-site facilities considered part of DFRC.

GRC: For Glenn Research Center (GRC), these services shall also be provided to the Plum Brook Station.

LaRC: For Langley Research Center (LaRC) these services shall also be provided to off-site facilities considered part of LaRC.

IT Security is an inherently governmental function under the auspices of the Office of the Chief Information Officer (OCIO). Accordingly, certain IT security activities shall be the responsibility of the ODIN Contractor, and some will not.

The Government will retain ownership of the entire LaRC cable plant and the network electronics infrastructure. The cable plant includes the cabling for the telephone system, the Langley Research Center Network (LaRCNET), the video distribution system, and the peripheral circuits used for alarm circuits and monitoring environmental systems. The phone system, fax services for LaRC-owned fax machines, and video distribution, teleconferencing and Integrated Services Digital Network (ISDN) services will be the responsibility of the ODIN Contractor. The Government will also retain responsibility for the following functions: policy, technical & LaRCNET standards/architectures, and planning and advanced development in the areas of IT security, remote communications, video, cable plant, network electronics, network services and LAN interfaces. The term "technical & LaRCNET standards/architectures" refers to the Government's plan to continue to adhere to technical industry and LaRC network standards, and associated architectures for systems that are currently deployed and/or may be deployed at LaRC in the future. The term "planning and advanced development" refers to Government activities directed towards the planning, evaluation, and testing of advanced communications technologies that will enhance LaRC's capabilities and assure LaRC's ability to remain technologically competitive. Joint Government/ODIN activities/endeavors will primarily be associated with the transitioning of new technology in the above technical areas from a state of evaluation and testing to one of production (operations and management).

2 – 16 Reserved Core

17. Authorized Officials:

The Delivery Order Contracting Officer (DOCO) and Alternate DOCO (if applicable) have been appointed in accordance with the Master Contract and are:

Center	DOCO	Alternate DOCO
ARC	Christine Munroe	N/A
DFRC	Chivonne Everette	N/A
GRC	Leahmarie Stervagi	Nikki Brown
LaRC	Sharon Hare	N/A

The Delivery Order Contracting Officer's Technical Representative (DOCOTR) and Alternate DOCOTR (if applicable) have been appointed via NASA Form (NF) 1634 entitled "Contracting Officer Technical Representative (COTR)/Alternate COTR Delegation". The Contractor shall refer to the most current NF 1634 for the name of the current appointee(s).

18. **Period of Performance:** The period of performance of this Delivery Order (DO) shall be 36 months from the effective date of this Delivery Order.

19. **Infrastructure Upgrade Proposal (IUP) Submission Requirements – Master Contract**
   C.2.1: The ARMD Centers anticipate the need to request infrastructure upgrade proposals related to ODIN supported areas to accommodate the need for special or non-standard (i.e., not bundled within the seat) work to be performed. Each IUP submission, per the given response times, shall include the following items:
   a.   Prime Contract Effort:

   - i.   Identification of proposed labor categories and hours.
   - ii.   Application of the appropriate rates in accordance with the clause entitled "Advanced Agreement on IUP Fixed Price Rates."
   - iii.   If a labor category is not currently listed in this clause, the Contractor shall provide the proposed base labor rate and the applicable indirect cost (fringe, overhead, and G&A). If the applied indirect rates are not consistent with those used to establish the rates in this clause, explain. The profit rate (not-to-exceed 10%) used in calculating the negotiated listed labor category rates shall apply.
   - iv.   If proposed, a handling rate shall be applied to materials.

   b.   Subcontract Effort: Proposals submitted in response to this Delivery Order shall `comply with FAR Part 44 and the following:

   - i.   The Contractor shall solicit quotations from at least three sources.
   - ii.   Where only one source is available, justification for the sole source shall be documented, including price analysis and technical rationale.
   - iii.   This above information is not required to be submitted with proposals, but shall be made available at the request of the Government.
   - iv.   The handling rate shall be applied in accordance with the clause entitled "Advanced Agreement on IUP Fixed Price Rates."

   c.   The Contractor shall, for both prime and subcontract efforts, submit a listing of materials/equipment with prices.

   e.   The Contractor shall develop a proposal (cost, schedule, and technical approach) for each upgrade in accordance with the following table.

   f.   Upon acceptance of an IUP, all hardware, software, and materials (i.e., included as IUP cost by the Contractor) shall be included in the Government-owned infrastructure and shall not be included in the ATV.

Proposal Type	Proposal Maximum Turnaround (working days)	Defining Characteristics	Examples
Rough Order of Magnitude (ROM)	3	Applies to any size project. Typically used for future planning, budgeting, and other similar exercises. Estimates (schedule/dollars) should be sufficiently accurate ("order of magnitude") to allow for "go/no-go" decisions to proceed with a	- Construction Advocacy - Potential leading edge technology deployment

		request for a more formal proposal. The Contractor is not bound to any estimates provided in this category.	
Short Term	5	Small projects. If funded, it is anticipated that all work can be accomplished through the purchase and implementation of standard COTS technology and/or total time expected to complete is less than 1 month. Can usually be handled within the Contractor's umbrella of responsibility, but may require coordination with another Contractor or organization.	- Add macro to existing s/w - Install COTS s/w - Install Extra Phones
Mid-Term	15	Medium scale. If funded, it is anticipated that work to be performed will require some customization/integration of COTS technology and will require 2-3 months to complete. Can usually be handled within ODIN Contractor's umbrella of responsibility, but may require coordination with another Contractor or organization.	- Install/integrate COTS/GOTS technology - Rewire a hallway - Migrate pilot project to production
Long Term	25	Large scale. If funded, it is anticipated that work will require some original design and development and/or total time expected to complete is 3 to 6 months. May require coordination with another Contractor or organization.	- Center wide deployment of a new agency GOTS application - Rewire entire floor of a building
Very Long Term	35	Long range. If funded, anticipated that work will require a significant amount of original design and development and/or total time expected to complete is greater than 6 months. May require materials lead-time and/or coordination with other Contractor or organization.	- Rewire entire building - Center wide deployment of new capability (e.g., PKI)

20. Advance Agreement on IUP Fixed Price Rates

a.   Prime Contract Effort: The Contractor shall utilize the following calendar year rates in developing proposals for the Government. Any changes/additions to labor categories and/or rates are subject to DOCO approval prior to use. The Contractor shall propose, prior to the issuance of the Delivery Order any other labor categories deemed necessary, subject to Government evaluation.

ARC - Labor Hour Burdened Rates
(Includes Escalation, Fringe, Overhead, G&A, and Profit)

Labor Hour Burdened Rates				
(Includes Escalation, Fringe, Overhead, G&A, and Profit)				
Labor Category	2007	2008	2009	2010
(b)(4)				

DFRC - Labor Hour Burdened Rates
(Includes Escalation, Fringe, Overhead, G&A, and Profit)

RFP Labor Category	Year 1 Rates	Year 2 Rates	Year 3 Rates
(b)(4)			

GRC - Labor Hour Burdened Rates
(Includes Escalation, Fringe, Overhead, G&A, and Profit)

Labor Category	Contract Year 1	Contract Year 2	Contract Year 3
(b)(4)			

LaRC - Labor Hour Burdened Rates
(Includes Escalation, Fringe, Overhead, G&A, and Profit)

Labor Category	Current	Year 1	Year 2	Year 3
(b)(4)				

IUP LABOR CATEGORY DEFINITIONS (GRC And LaRC ONLY)

1. PROGRAM MANAGER
The primary point of contact for the customer and management contracting representatives. Responsible for establishing and implementing work standards and processes, delegating contractor/subcontractor assignments.

2. TECHNICAL OPERATIONS MANAGER
Responsible for all aspects of project performance including technical, contractual, administrative, and financial. Manage and supervise personnel involved in all areas of project activity. Organize and assign responsibilities to subordinates, and oversee the successful completion of all assigned tasks.

3. QUALITY ASSURANCE ANALYST
Review program documentation to ensure adherence to standards and requirements. Coordinate with the project manager to ensure problem resolution & user satisfaction.

4. COMPUTER SYSTEM ANALYST
Apply skills in the interface of software with computer hardware systems. Apply Computer-Aided Software Engineering (CASE) tools to complex oftware system development.

5. DATABASE ADMINISTRATOR
Perform data analysis, database design, development activities, and implementation, as directed, for databases and database conversions. Perform database restructuring activities

6. PROGRAMMER ANALYST
Participate in the design of software tools and subsystems to support business use and software implementation. Assist the senior programmer to interpret software requirements and design specifications. Prepare code, integrate and test software components, modules, and the resulting implementation.

7. COMPUTER SYSTEM SECURITY ANALYST
Apply function-wide disciplines for the planning, analysis, design, and construction of automated information systems across a major sector of the business. Ensuring all documentation and policies meet FAR security requirements.

8. NETWORK DATA COMM ANALYST
Analyze networking and communications operations. Ensure production schedules are met and system resources are used effectively. Coordinate the resolution of production-releated problems.

9 . TECHNICAL EDITOR
Provide documentation and presentation data across multiple media formats.
Media can consist of electronic, voice, video, photo, and hard copy

10. PROJECT DESIGN ENGINEER
Perform a variety of network management services related to the operation, performance, or availability of data communications networks. Modify command language programs, network start-up files, assign/reassign network device logicals, analyze network performance, and recommend adjustments to a wide variety of complex network management functions. Responsibility for overall performance and availability of networks.

11. SENIOR PROGRAMMER

Guide the analysis of business applications and development of design specifications for functional activities. Develop the block diagrams and logic flow for systems development. Translate detailed design requirements into computer software. Test, debug, and refine computer software to produce the required product. Ensure preparation of required documentation, including both program level and user-level documentation.

12 NETWORK/TELECOMM ENGINEER
Evaluate communication hardware and software, troubleshoot LAN/MAN/WAN and other network-related problems, provide technical expertise for performance and configuration of networks

13. SENIOR COMPUTER SYSTEM ANALYST
Design software tools and subsystems to support and manage software systems implementation. Manage software development and support using formal specifications, data flow diagrams, other accepted design techniques, and Computer Aided Software Engineering (CASE) tools.

14. SECURITY HSPD-12 SPECIALIST
Security specialist knowledgeable in all current security requirements. Able to guide and coordinate work efforts to meet all necessary security processes and requirements as identified in HSPD-12 and other government security documents.

15. PROJECT MANAGEMENT
Provide coordination and guidance in preparing appraisals of systems and techniques, and in integrating network into the overall functions of processing

16. TECHNICIAN
Responsible for providing telecommunications, networking and/or computer direct support in the areas of e-mail, directories, desktop applications, network connectivity, and telecommunincations connectivity.

   b.   Handling Rates for Other Direct Costs (ODC):

   (1)   The following allocations represent the Contractor's handling (MHX) rates to be used in developing IUPs: (CY is Calendar Year)

      A.   MHX1 rate (b)(4) CY 2007, (b)(4) CY 2008, (b)(4) CY 2009, (b)(4) CY 2010) - applies to all material purchases that are less than $100,000.

      B.   MHX4 rate (b)(4) CY 2007, (b)(4) CY 2008, (b)(4) CY 2009, (b)(4) CY 2010) - applies to the Material Handling Pool that is used to accumulate costs associated with the acquisition of certain goods and services. Elements of cost subject to this rate include material, supplies, training and purchased services and equipment rentals regardless of dollar value.

      C.   Therefore, materials purchases that are less than $100,000.00 shall apply MHX1 and MHX4 rates.

   (2)   General & Administrative Expenses rate (G&A).

```
                    (b)(4)
```

```
            (b)(4)           . The G&A rate is
```
applied to each cost objective to arrive at their allocation of G&A
expenses. The following G&A rates are applicable to expenses:

CY 2007   CY 2008   CY 2009   CY 2010
  (b)(4)   (b)(4)   (b)(4)   TBD % (To be proposed and
approved via bi-lateral modification prior to January 1, 2010)

> (3) These provisional rates are subject to DCAA audit and may periodically change. A bilateral modification to this Delivery Order Paragraph will be done when rates exceed more than (b)(4) of the above provisional rates. The contractor is instructed to use their current provisional rates up to a (b)(4) cap of the stated rates. The DOCO shall be **notified** prior to the use of any new rate.

21. **Due Diligence Adjustment – Master Contract A.1.1:** A Due Diligence Adjustment is not applicable for this Delivery Order.

22. **Subcontract Reporting -- Master Contract A.1.2.2(d)(4) and DRD Core-2:** In accordance with Master Contract FAR clause 52.219-9 (Small Business Subcontracting Plan), the Contractor's proposed subcontracting plan has been reviewed and accepted by the Government. As a result, the Contractor's subcontracting plan is hereby made a part of this Delivery Order.

The subcontracting goals for the ARMD centers, expressed as a percentage of total Delivery Order dollars, are as follows:

Category	%
Small Business (SB)	
Small Disadvantaged Business (SDB)	
Woman-Owned Small Business (WOSB)	
Historically Black Colleges and Universities (HBCU) and Minority Institutions (MI)	(b)(4)
HUB Zone	
Veteran Owned	
Service-Disabled Veteran Owned	

23. **Performance Retainage Pool (PRP) – Master Contract A.1.8:** The PRP is (b)(4) and will be awarded on a discretionary basis, i.e., all, partial, or none. Any amount not authorized for disbursal will not be carried forward, and the Delivery Order will be unilaterally modified to decrease the order dollar amount. The PRP will be awarded on a semi-annual basis.

24. **Transition Bonus – Master Contract A.1.7:** A transition bonus of up to (b)(4) is available for completing a transparent/no disruption in service transition with the Center's successor Contractor, but is only applicable to the end of this Delivery Order. The transition bonus may be granted if there is a transparent/no disruption in transition from the incumbent to a successor Contractor. Should a transition bonus be granted, the bonus will be disbursed in accordance with the schedule in the Contractor's transition plan. The Center Director or designee will determine if the transition is smooth and successful and the amount of the bonus, if any. The Center Director's decision is final and not subject to

the disputes clause. If the incumbent Contractor is the successor Contractor no transition bonus will be granted.

25. **Liability – Master Contract A.1.20 and DRD Core-4:** In the event of asset losses, the Contractor shall conduct the investigations and, if theft is suspected, shall request the assistance of Center security to ascertain pertinent facts and recover lost equipment. The Contractor shall keep accurate records of losses that are not recovered and deliver this information as set forth in **DRD Core-4.** Lost value shall be determined by using lease cost and depreciation. The Contractor shall keep accurate records of losses that are not recovered and shall provide quarterly updates of deductions against the annual $100,000 asset liability clause for lost and missing equipment.

    The Contractor shall investigate as a potentially missing asset all desktop/laptop seats that do not automatically update their asset inventory information for 60 consecutive calendar days, unless waived by the DOCOTR.

    The Contractor's investigation shall include contacting the user and following the Center's procedures for reporting lost/stolen/missing assets in order to determine if the asset contained sensitive data. The Contractor shall notify NASA Security by submitting the Center's Lost/Stolen equipment form. Copies of all Loss/Stolen Forms shall be sent to the DOCOTR.

26. **Stevenson-Wydler Act - Master Contract C.3.2.2 and Core DRD-3:** The Contractor shall donate outgoing ODIN hardware for Stevenson-Wydler-type activities as follows: at least 25 percent of all out-going from the Center (i.e., a seat that has been refreshed once by ODIN) upon being refreshed a second, or more, time. ODIN-owned computer hardware shall be provided, at no cost, to eligible organizations. This activity shall be coordinated with the Government and reported in accordance with DRD Core-3.

    The Contractor shall make equipment available for pickup at the Government facilities. The responsibility for and any cost associated with pickup or shipment to a receiving organization's location lies with the receiving organization.

27. **Asset Possession Tracking:** The Contractor shall maintain a system for tracking asset possession, including but not limited to, providing a form that the customer and Contractor sign to indicate change in possession of an asset, either from customer to Contractor or Contractor to customer. A copy of the signed form shall be provided to the customer, and the Contractor shall maintain a file of all such forms for the duration of the Delivery Order. In addition, if the property is Government-owned and is to be taken off site, the Center's procedures shall be followed to obtain proper authorization.

28. **Audits, Investigations, and Emergency Corrective Actions:** The Contractor shall provide all necessary support in the event of a Government-initiated investigation involving the Contractor's team or the Contractor's customers, and shall provide all services necessary to properly respond to NASA IT security bulletins or notices from the NASA Incident Response Center (NASIRC), or the NASA Chief Information Officer that apply to any Contractor-supported system or environment. The Contractor shall take necessary and/or immediate corrective actions on ODIN seats in response to these bulletins and notices, and shall notify the Center IT Security Manager (CITSM) or designee of any suspicious activities per Center security procedures. Audits, investigations, and emergency corrective actions may be initiated by the Office of Inspector General (OIG); Office of Management and Budget (OMB); Government Accounting Office (GAO); Federal Bureau of Investigation (FBI); or the Center's IT Security Manager, Chief Information Officer; Chief Counsel; Head of Human Resources, or others as directed by the DOCOTR.

29. **Miscellaneous Deliverables:** While separate DRDs are not created for the following ARMD deliverables, the chart below outlines the various ARMD deliverables required by this Delivery Order for administration purposes. See the respective Delivery Order Paragraph for complete details of these requirements.

Section	Paragraph Title	Item Due	Due Date(s)
II., Section A, ARMD General Requirements	Asset Management Database	Delivery Order Asset Management Database	A complete set of all monthly archives shall be provided to the DOCOTR at Delivery Order completion. (Due March 31, 2010)
II., Section E, ARMD Catalog Services	Volume Discount for Catalog Items	A letter to each ARMD Center DOCO that specifies the volume discounts (cost and percentage savings) that were realized in the previous 6-month period.	Semi-Annually (Due within 30 days after each semi-annual period)

Part II. ARMD REQUIREMENTS

Section A. ARMD General Requirements

1-14   Reserved CORE

15. **Homeland Security Presidential Directive 12 (HSPD-12) Support** – See Additional Center Specific Requirements.

16-19 Reserved CORE

20. **Agency Forum Participation:** The Contractor shall participate in Agency IT forums such as IT Security Working Groups, the Postmasters Working Group, Active Directory Working Group, the UNIX Working Group, Enterprise Architecture, NOMAD/COM and other working groups directly related to the services provided under the Center's Delivery Order, as necessary to fully support each center's Delivery Order.

21. **Support of Agency Initiatives:** As NASA continues to evolve its Agency initiatives (e.g. Enterprise Architecture, HSPD-12, NOMAD/COM), the Contractor shall remain cognizant of and committed to these requirements, advising the Government of any conflicts with the proposed initiatives that are directly related to the services provided under this Delivery Order.

22. **Revisions to NASA Directives, Technical Standards, Procedures, or Guidelines:** For any proposed change to NASA Directive, Standard, Procedure, or Guideline (e.g., NASA-STD-2804x, NASA-STD-2805x, NPR 2810.1x, where x is the most current version)

that the Contractor believes will have an impact to the seat costs, the Contractor shall bring forward that impact during the appropriate review period for that proposed change, and shall also notify the DOCOTRs of the impact(s). The Government will not consider any request for cost adjustment after a proposed revision of a standard has been approved. The Government will provide the standards documents to the ODIN Contractor during the review process. The Contractor shall bring forward comments during the review process.

To review directives in their entirety, see the NASA Online Directives Information System (NODIS) Library at the following URL: http://nodis3.gsfc.nasa.gov/Library/main_lib.html

23. **Asset Management Database:** A copy of the Delivery Order Asset Management Database shall be archived monthly, on approximately the 15th of each month, for future reconciliation purposes, and this data shall be retained for the life of the Delivery Order. The ODIN Contractor shall update the database on a real-time basis based on Government-approved changes. This database shall include all services, along with quantities and pricing for each, included in the current Delivery Order. The DOCOTR shall have network access to the Delivery Order database. Additionally, a complete set of all monthly archives shall be provided to the DOCOTR at Delivery Order completion.

24. **Asset Management Tool Availability:** The Contractor shall have the ability to assess and report assets (hardware components and software versions and releases) within 24 hours of Government request.

25. **Principle Period of Maintenance (PPM):** For the Critical service level, the principal period of maintenance is 24 hours a day x 7 days a week. For all other service levels, the Principle Period of Maintenance is 6:00 a.m. to 6:00 p.m. Monday through Friday, local time, on Government workdays.

26. **Infrastructure Maintenance Support Hours:** No planned infrastructure maintenance activities shall be scheduled during prime hours (6:00 a.m. - 6:00 p.m. local time on Government workdays) without prior approval by the affected Center's DOCOTR, followed by notification to affected personnel at each Center. Scheduled outages during non-prime hours shall be coordinated with the specific customers, approved by the appropriate Center's DOCOTR, and followed by notification of all affected personnel at each Center.

27. **Infrastructure Support:** All ODIN-supported hardware and software that are part of the institutional IT environment related to desktop and network services shall have applicable software technology refreshment within 1 year after vendor release. This shall include operating systems, services software, and all other associated supporting software.

The institutional IT environment is defined as all ODIN-managed components, (excluding client desktops), hardware, and software required to deliver ODIN seats and services to the end user.

All ODIN-supported hardware and software that is part of the institutional (i.e., infrastructure and back office support) IT environment (e.g., network cable plant components, servers) shall have applicable hardware maintenance, system software maintenance, application software maintenance and/or return to service within 2 contiguous hours during prime hours (6:00 a.m. – 6:00 p.m. local time on Government work days, Monday – Friday) and within 6 hours (for LaRC, within 4 hours) for all other times. Trouble calls may be placed on institutional components at any time by any individual (24 hours a day x 7 days a week). Unless waived by the DOCOTR, all users of the component shall be considered in a "down" state from the time of the failure, regardless of how the problem was reported or detected by the Contractor. In addition, all institutional servers shall have data backup/restoration and software tech refresh services at the "regular" service level.

If software refreshment requires upgrading hardware, the Contractor shall provide the necessary hardware components.

28. **Infrastructure Technical Documentation:** The Contractor shall completely and accurately record all work performed under the ODIN contract. At a minimum, these records shall contain detailed technical information on the design, installation, maintenance, operation, augmentation, and decommissioning of services. The Contractor shall maintain physical and logical drawings of all systems under the scope of ODIN including major components (e.g., servers, storage devices, switches, routers, hubs, concentrators, repeaters, bridges, media converters) that typically make up the institutional center IT infrastructure. All records shall be in a mutually agreeable format between the Government and the Contractor, and shall be available to the Government.

Physical installations shall be recorded on as-built drawings. The as-built drawings shall identify, at a minimum, the locations of devices, inside and outside cable runs, cable terminations, pair assignments, device and cable types/manufacturers, and labeling conventions for cable, media, devices, patch panels. The Contractor shall give particular attention to concealed work that would be difficult to record at a later date such as cable runs through the Center's manhole system. The Contractor shall coordinate the creation/revision of these drawings with other pertinent Center organizations (e.g., facilities) and contractors as appropriate and/or directed by the DOCOTR.

For each service, the record shall have the information required to allow one to understand and/or operate the service. All documents created and/or revised by the ODIN contractor shall be consistent with existing Center documents and tools.

The Contractor shall maintain an up-to-date master table of contents of all drawings under their control, which shall be made available to the Government in an electronic, searchable form. The Contractor shall also maintain electronic and hardcopies of the latest version of each drawing on file for inspection by the Government at any time. At a minimum, for each drawing table of contents shall contain the title or description, service location (e.g., Building/Room), creation and/or revision date, format (e.g., blueprint), and drawing archival location. All documentation shall be the property of the Government.

29. **Service Delivery Impacts:** The Contractor shall notify the Government in writing of issues and concerns that are, or have the potential of, hindering the Contractor's ability to deliver ODIN services in accordance with Delivery Order requirements. Items identified shall be classified according to their associated urgency and include a clear description of the impact, along with any proposed recommendations for addressing the situation. In general, the issues should be those that are out of the direct control of the Contractor to change and no reasonable work around appear to exist. Examples of issues or concerns that could be addressed are items related to:

- Negative impacts of new or planned NASA policies (with the exception of those that have undergone formal review process in accordance with Delivery Order Section/ Paragraph II.5), infrastructure, technology solutions, as well as concerns about existing policies, infrastructure or solutions that currently, or may in the future, impact ODIN service delivery.

- Concerns about particular situations involving groups of users with atypical or evolving usage habits that present new support challenges may also be specified.

- Other impacts and concerns as determined by the Contractor.

30. **Service Level Changes:** The ODIN Contractor will activate and implement service level changes within 5 business days upon receipt of government request.

31. **Temporary Seats – Master Contract C.5.9.3:** The Contractor shall provide temporary seats appropriately configured for the requested seat type, including any catalog-ordered augmentation. Pricing for a temporary seat shall be based on the monthly price of a comparably configured full seat. Prior quarter systems may be used for temporary seats provided they meet the users' performance requirements. If required by the customer and approved by the DOCOTR, current Attachment R systems shall be used. Requests for 5 seats or less to be used for the same function shall be fulfilled within two business days; requests for more than 5 seats shall be fulfilled within 10 business days.

32. **Computer Seat Quality Assurance:** Whenever a seat is repaired, replaced, or refreshed, the Contractor shall ensure that all functionality of the seat, including all hardware, all software, and all externally attached devices, is operating properly in cases where such hardware, software, and externally attached devices are fully compatible with the repaired, replaced, or refreshed seat. The Contractor shall include the cost of this responsibility in the seat cost. The following are clarifications of this requirement:

    a. If requested by the Government, the Contractor shall, in cases where the internal/external component is fully compatible with the new seat, reinstall the existing external and internal devices, including monitors, to the user's seat in order to maintain existing functionality. This reinstallation shall not be counted in the Center's allocation of move/add/changes.
    b. If the Contractor cannot reasonably reinstall the component due to incompatibilities and the user still requires the service, the Contractor shall assist the customer to research potential solutions. It is the user's responsibility to purchase or acquire the replacement components, however, the installation shall not be counted in the Center's allocation of move/add/changes.
    c. The Contractor shall be responsible for ensuring that all seats are restored to the same working functionality that existed before an outage. Upon request of the Contractor the DOCOTR will evaluate the circumstances of the event and determine appropriate consideration, if any.
    d. To the maximum extent possible, user data, preferences, and settings shall be restored and transferred by the Contractor to a repaired, replaced, or refreshed seat.
    e. The Contractor shall notify the DOCOTR of outstanding repair issues over 10 business days old.

33. **ODIN Model and Services Training:** The Contractor shall offer ODIN Model and Services training to those who have not been exposed to ODIN, such as temporary staff, or new employees, or new POCs. This training shall be provided using at least two methods:

    a. Information shall be provided on a continuous basis to all Center employees on the ODIN web page about ODIN and the services it provides.
    b. Instructor-led training shall be provided in a Government-provided training center. Classes shall be available quarterly at no additional cost to the Government.

Section B. ARMD Computer Seat Services

1-40 Reserved CORE

41. **Semi-Annual Attachment R Configuration Process:** The purpose is to achieve hardware savings through standardizing the Attachment R configurations for volume

hardware buys. The certified and accepted Attachment R configurations for the April and October quarters will remain constant for a six-month period.

All desktop/laptop/workstation hardware delivered shall, at the time of installation, meet or exceed all of the specifications of the current Attachment R unless waived by the DOCOTR.
This process does not change the current schedule for technology refreshment of ODIN seats based on Center-specific technology refresh periods.

The certification of the equipment for technology refreshment based on the performance specifications in Attachment R shall continue to be accomplished on the prescribed quarterly basis. If the submitted configurations fail to meet the performance specifications for the January or July quarters, the Contractor shall offer new configurations that meet or exceed the baseline of submit a request for waiver. If a new configuration or waiver is offered and approved, the Contractor shall either deliver the new configuration in lieu of the April or October configuration, or continue to provide the January and July configurations based on NASA consent.

42. **Shared Printer Infrastructure:** The Contractor shall discuss any plans to move any shared peripheral printers with the DOCOTR in order to provide an opportunity for the Government to appropriately adjust subscription service levels.

43. **Smaller Footprint Printer:** Subject to agreement of the customer(s) using the printer and approved by the DOCOTR, ODIN shall provide an alternative smaller printer of equal or lesser cost in the following cases:

   a. For a customer who subscribes to critical print service and requires a dedicated printer;
   b. For customers signed up for shared peripheral print services whose collective print volume is very low or if the "footprint" of the usual printer is too large for the office/facility environment.

The alternate smaller printers are not required to meet the minimum page-per-minute requirements of the Master Contract, but the speed of the substituted printer will be a consideration in the DOCOTR's concurrence for substitution. If the customer is dissatisfied with the performance of the smaller printer, ODIN shall replace, at no additional cost to the Government, the smaller printer with the larger printer.

44. **Local Peripherals:** Maintenance for existing Government-owned local peripherals (e.g., attached printers, scanners, external hard-drives) shall be accomplished through sign-up of the peripherals as MA seats and their pricing shall be calculated as a percentage of the Gross Asset Value (GAV).

45. **Technology Refreshment (Hardware) – Master Contract C.7:**

At the time of technology refresh, if a system has added desktop hardware components that were not part of the initial baseline configuration or that exceed the comparable components of the new hardware being offered, the Contractor shall use best effort to reuse those additional components in the refresh box. These components shall only be used if compatible with the new system and if requested by the user.

Unless waived by the DOCOTR, the Contractor shall not reduce, as compared to the previous version, the size or speed of any Attachment R system configuration item of the purchased ODIN desktop seat (i.e., each succeeding revision shall be of equal or greater than the last). When portable computers are refreshed they must be replaced with

machines of similar functionality with current technology and units of equal to or better physical size and weight.

"Waterfall" hardware shall not be used to satisfy new seat requirements or refreshed seat requirements, unless waived by the DOCOTR.

At the time of refresh, user data shall be maintained for a minimum of 7 days to ensure that all user data has been transferred successfully.

46. **Technology Refreshment (Software) - Master Contract E.3.1.7:** Master Contract requirements are supplemented with the following:

   a. Software refresh of standard application software suite products shall be completed for all full seats within 90 calendar days of the first seat being upgraded with the software refresh.
   b. If a Government hold has been issued for refreshment of a standard application software suite product, software technology refresh shall be completed no later than the original scheduled completion date plus the number of days the Government hold was in place for all full seats.
   c. A new product added to the standard application software suite shall be fully deployed on all full seats within 90 calendar days of Delivery Order mod execution.

47. **Triage Support for ODIN and Non-ODIN Components - Master Contract C.5.5 and DRD ARMD-05**

   Master Contract Requirements are supplemented with the following:

   a. Within 45 calendar days of being made available to the Contractor by written notification from the DOCOTR, updated releases of Triage 1 and 2 software shall be fully deployed to all required desktops.
   b. Within 90 calendar days of Delivery Order mod execution that adds new triage 1 or 2 software, the software shall be fully deployed to all required desktops.
   c. Installation or upgrade of triage 1 or 2 software shall not be counted against the Moves/Adds/Changes quantity.
   d. Upon start of a deployment or upgrade effort for a triage 1 or 2 component, weekly progress reports shall be delivered, in accordance with ARMD-05.

48. **ODIN Standard Application and Triage Software – Core Attachment C:**
   For any product in the Core Standard Software Load, the Contractor shall provide the following services within the basic seat cost (i.e., does not require any additional purchases off the CSCC or elsewhere):
   a. Product purchase
   b. Installation and integration
   c. Full help desk support including knowledgeable technical user consultation
   d. Accessible by all "full support" (GP/SE) seats
   e. Maintenance and refreshment according to the subscribed service levels
   f. Version and Release upgrades, including installation

   For any Triage Level 1 product, the Contractor shall provide the (following services within the basic seat cost (i.e., does not require any additional purchases off the CSCC or elsewhere):
   a. Installation and integration
   b. Full help desk support including knowledgeable technical user consultation
   c. Accessible by all "full support" (GP/SE) seats for any seat that a license is provided

For any Triage Level 2 product, the Contractor shall provide the following services within the basic seat cost (i.e., Does not require any additional purchases off the CSCC or elsewhere):
  a. Installation and integration
  b. Trouble ticket management and redirection to non-ODIN service provider for problem resolution
  c. Accessible by all "full support" (GP/SE) seats for any seat that a license is provided

During technology refresh, the Contractor shall make a best effort to reinstall Triage Level 3 software. No additional purchases (i.e., catalog or other, are required for these services).

49. **Installation of Triage 2 Software:** Individual customer requests for an initial load of, or upgrade to, a triage 2 software component shall be completed on full seats within 2 working days or as negotiated with the DOCOTR. Such installations shall not count against the Moves/Adds/ Changes quantity.

50. **Backup and Restore Service – Master Contract E.3.1.16:** The Contractor shall provide the necessary infrastructure, client applications, and server support to provide center-wide backup and restore for desktops' local disks storage at the subscribed service level. Backups shall be performed in a Center-approved manner so as to not compromise network performance. Additionally, per the Master Contract, this service shall provide the capability to restore files and directories within 4 work hours of request for files and directories changed more than 1 day before and no older than 30 days, unless waived by the DOCOTR.

The ODIN Contractor shall be responsible for configuring systems so that all user data (e.g., email downloads and email attachments (where applicable), user files, user preferences, user settings, and third-party applications) are stored in a common location on the local computer, dependent on Center policy.

For basic and regular service levels, the ODIN Contractor shall be responsible for providing on-going training and outreach so that customers will place user data in the required location. Additionally the ODIN Contractor shall provide outreach to educate the users about their current back-up subscription level and to inform them of other service level options that are available.

The ODIN Contractor shall provide Center-wide backup and restore at the subscribed service level for all ODIN supported seats. At least once semi-annually, the ODIN Contractor shall verify that a restore using the previously obtained backup media, can be successfully executed that both accurately represents the most recent file residency and can be restored within the required timeframe. The verification process should be performed in a test environment using at least 5 randomly selected seats.

Additionally, the backup system shall provide the customer with a notification of whether or not their last scheduled backup was run completely and successfully, instructing them to contact the Help Desk if it did not. The Contractor shall also provide a mechanism for a customer to use at any time to determine when their last successful backup occurred.

If lost, corrupted, or erased data or files cannot be restored due a failure of the backup system, the Contractor shall be responsible and shall pay all costs to recover the data or files from the hard drive using a commercial recovery service.

51. **Remote Control/Seat Management:** No remote seat management shall be performed without the use of Center-provided or Center-approved session security products, and

remote management of desktop seats and servers shall be performed by the Contractor in accordance with Center IT security policy. Implementation of remote access requires coordination with the Center IT Security Manager to ensure the firewall rule set is configured to allow such access. On an exception basis because of the presence of sensitive data or other factors, remote control and/or maintenance of desktop systems and software may not be allowable or possible on certain systems.

52. **IPv6 Compliance:** Any new or refreshed ODIN-provided or catalog-purchased network device shall be IPv6 compliant unless otherwise approved by the DOCOTR.

53. **Retention of Replaced Hard Drives:** When an internal or external hard drive is not repairable and cannot be verified as properly sanitized, whether the associated CPU is owned by the Government or by the Contractor, the unrepairable hard drive shall become the property of the Government and shall be physically turned over to the DOCOTR's designee. Any costs incurred by the Contractor because unrepairable drives need to go to the Government rather than to the manufacturer/supplier shall be specified separately on monthly invoices.

54. **Software Available for Home Use:** The Contractor shall provide, upon request by any ODIN desktop seat customer, current Center defined software that is designated below as "available for home use". This includes providing software updates when they are supported by the requesting ARMD center. Software shall be provided to the user within 2 workdays of the request. The Contractor shall also develop detailed instructions for home installation and provide a software distribution mechanism. The cost for meeting this requirement shall be included in the standard desktop seat price.

Section C. ARMD Server Services

RESERVED

Section D. ARMD Communication Services

RESERVED

Section E. ARMD Catalog Services

1-3: Reserved CORE

4. **Catalog Maintenance:** For Category 1 and 2 items purchased from the catalog, hardware maintenance is defined as standard ODIN "break-fix" and "return to service." For Category 3 purchases, maintenance is defined as manufacturers' warranty. For software purchased from the catalog, maintenance is defined in accordance with the manufacture's definition and licensing agreements. Service metrics for these maintenance items shall be the same as for the associated desktop seat.

5-7 Reserved CORE

8. **Volume Discount for Catalog Items:** The ODIN Contractor's ARMD volume discount, calculation, and invoicing shall be as follows:

The Contractor shall attempt to consolidate catalog ordering across all supported NASA centers in order to provide the Government with a volume discount procurement of ODIN catalog services. The Contractor shall take the initiative to contact each ARMD center to determine if there is a ARMD Mission interest in obtaining possible candidates for volume buys. The Contractor shall aggressively work with their IT providers to identify and maximize potential opportunities for volume buys. Whatever discount percentage that the Contractor obtains, the same discount percentage shall be provided to the Government.

The Contractor shall provide a letter semi-annually to each ARMD Center DOCO that specifies the volume discounts (cost and percentage savings) that were realized in the previous 6-month period.

9-13 Reserved CORE

14. **Continued Use of Catalog Products and Services Acquired during Previous Delivery Order:** Catalog products and services that were acquired under a previous Center Delivery Order may continue to be used by end users throughout this Delivery Order period of performance. For initially purchased items whose 36-months of service has not expired, support for the catalog purchase shall continue at the original maintenance level (i.e., Category 1 or Category 3). For items whose support period has expired as of the effective Delivery Order date or during the term of this Delivery Order, within 30 days prior to service expiration, the Contractor shall notify the customer in writing of their options for continued maintenance support (e.g., sign up for an MA Seat, continue to use product/service without any support, purchase new product/service from catalog that includes 36 months of support). The ODIN Contractor shall continue support of the catalog item until the customer has been notified within the terms described in this paragraph.

15. **Color Network Print Services:** Color print services shall be offered via a catalog one- time charge to upgrade a black and white network printer to color. After the upgrade, the printers shall receive the same level of support as the standard black and white printers.

16. **Ergonomic Keyboard and Mouse:** The catalog shall include a variety of offerings for ergonomic keyboards and mouse devices such as:

     a. Ergonomic Keyboard/Mouse at Refresh: ergonomic keyboard/mouse service coinciding with a full desktop seat's technology refresh. The catalog cost shall be the difference between the regular keyboard/mouse and the ergonomic keyboard.
     b. Ergonomic Keyboard/Mouse: ergonomic keyboard/mouse service purchased at any time. The catalog cost shall include the full cost of the ergonomic keyboard because the user's original keyboard/mouse may not be reusable by ODIN.

17. **Dedicated System Administrator Catalog Offerings:** The following catalog offerings shall be available upon the effective Delivery Order date:

     Dedicated system administration service for a specific group for 1, 3, 6, or 12 months of full-time or half-time service as coordinated with the DOCOTR. The intent is to provide a dedicated resource for a pre-defined group of users needing enhanced services as defined below. Two levels of service shall be available:

     a. Intermediate: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy. Contributes to the completion of milestones

associated with specific projects. Failure to achieve results or erroneous decisions or recommendations may cause delays in program schedules and may result in the allocation of additional resources. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

b. Senior: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practical, and consistent with organization objectives. Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Failure to obtain results or erroneous decisions or recommendations would typically result in serious program delays and considerable expenditure of resources. Frequent inter-organizational and outside customer contacts. Provides solutions to difficult technical issues associated with specific projects.

Dedicated system administration services purchased from the catalog shall be priced on a group basis, not on an individual seat or user basis. Purchase assumes the customer will provide office space in close proximity to the users being served for the person performing the dedicated system administration

The dedicated system administrator catalog offerings shall include a pre-negotiated set of the following services:

a. Network protocol administration.
b. Email account management.
c. Access to and management of Center's domain-available peripherals and services (e.g., USENET, time, DNS).
d. Network security management.
e. User account management.
f. Provision of Configuration Guidelines and/or remote or on-site system software installed according to those guidelines where applicable.
g. Workstation host level security, including information about and access to system/application security patches, network services access control mechanisms and/or anti-virus mechanisms with installation guidelines and/or remote or on-site installation.
h. System software problem resolution.
i. Hardware procurement configuration consultation.
j. Local, customized backup, restore, and archive service.
k. Site specific license management for Triage 3 applications.
l. Direct on-site user education and assistance.
m. Site-specific consistent system configurations.
n. Site-specific system documentation.
o. Deskside system administration functions to support the installation and effective execution of organizational specific applications.
p. Daily system monitoring.
q. System-level performance monitoring, tuning and optimization.
r. Site-specific client-server and network configuration management.
s. Deskside per system account management (e.g., create, lock, and remove IDs)
t. Site-specific peripheral management.
u. Web server and installation and administration and web site management
v. Address ongoing and emerging life cycle system administration issues for the installed computing environment.
w. Perform capacity planning and site architecture to optimize use of information technology resources.

Section F. ARMD Metrics

1-9 Reserved CORE

10.   **Level 1 Metrics – Master Contract Table F.1.1:** The following are the Level 1 metrics
for   ARMD that will be used in evaluating the Metric Performance Retainage Pool (MPRP):

Table F.1.1 – Level 1 Metrics Table

	Service Delivery (%)	Availability (%)	Customer Satisfaction (%)
			Code R
Desktop User Services			
Phone Service			
Fax Service			
Local Video Service		(b)(4)	
Administrative Radio Service			
Public Address Service			

11. Refresh Customer Satisfaction Surveys: The Contractor shall send a customer
satisfaction survey to each customer after a hardware technical refresh and software
refresh activities, as directed by the DOCOTR. These surveys will be included as part
of the monthly customer satisfaction metric calculation.

Section G. ARMD Help Desk

1-10 Reserved CORE

11. Tier One Help Desk Support: The Tier One Help Desk staff shall attempt to resolve a
problem at time of initial call for an average of 6 minutes before referring it to second level
support, unless a solution is determined to be imminent. Calls for which it is immediately
apparent that the Help Desk cannot resolve shall be immediately forwarded to the next level
support. The Tier One Help Desk should serve as the central entity to ensure that customer
issues are addressed efficiently and effectively with total customer satisfaction.

Part III. ARMD IT SECURITY REQUIREMENTS

1-20 Reserved CORE

21.   **Anti-Virus Protection:** The Contractor shall provide an automated approach and
managed anti-virus capability for both ODIN seats and non-ODIN systems connected to
the center network infrastructure. ODIN desktops and laptops shall be configured to
receive anti-virus updates at least once a day. The Contractor shall enable real-time file

protection and schedule full virus scans no less frequently than weekly for ODIN servers, and no less frequently than monthly for ODIN desktops unless otherwise defined in Center policies. The Contractor shall provide a Center-approved solution to protect the center from becoming vulnerable when laptop computers are returned to the center after being used off-site.

22. **Shared System Administration:** Shared system administration is permitted only with a written waiver approved by the Center IT Security Manager or designee.

23. **Session Security Requirements:** The Contractor shall use Center-provided security products if they are appropriate for the type of session security required. If Center-provided products are not applicable or appropriate for the type of security needed, the ODIN Contractor shall use only <u>Center-approved</u> products or technologies incorporating strong authentication and encryption. At present, NASA utilizes the Entrust product to help meet its IT Security needs. Other security products are likely to be acquired in the future.

Part IV. RESERVED – CENTER TECHNOLOGY INFUSION (Infrastructure Upgrades)

Part V. ARMD Clauses

1-7 Reserved CORE

8. **Safety and Health Plan–DRD ARMD-01:** In accordance with the NFS provision 1852.223-73 (Safety and Health Plan), the Contractor's proposed Safety and Health Plan has been reviewed and accepted by the Government. As a result, the Contractor's Safety and Health Plan is hereby made a part of this Delivery Order.

9. **Safety and Health Reporting – DRD ARMD-02:** In accordance with the NFS 1852.223-70 Safety and Health, Paragraph (d), the Contractor shall submit reports as described in DRD ARMD-02

PART VI.   RESERVED

Part VII. ARMD ATTACHMENTS

Attachment Number	Title	Dated	Number of pages
A	PRICE LIST FOR YEARS 1, 2, 3 (b)(4)		TBD
B	DATA REQUIREMENT DESCRIPTIONS	-	11
C	CORE STANDARD SOFTWARE LOAD CHANGES NOTE: NO INFORMATION TO DATE RESERVED TBD		
D	RESERVED		
E	REVISED SEAT AND SERVICE LEVEL (REF Master Contract Attachment E) NOTE: NO INFORAMTION TO DATE RESERVED TBD		
F	(RESERVED)		
G	(RESERVED)		
H	(RESERVED)		

ARMD Attachment B – DATA REQUIREMENT DESCRIPTIONS (DRD)

In addition to Master Contract DRDs, the Contractor shall comply with Core, Mission and Center-specific DRDs.

ARMD Mission

DRD NO.	SECTION/REF	DRD TITLE
ARMD-01	See DRD	Safety & Health Plan
ARMD-02	"	Safety & Health Reporting
ARMD-03	"	Mishap Reporting and Close Call
ARMD-04	"	Service Summary
ARMD-05	"	Technology Implementation Plan
ARMD-06	"	Backup Service Status

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN 2. DRD #: ARMD-01 Page 1 of 1

3. TITLE: Safety and Health Plan

SUBMITTAL REQUIREMENTS	
4. TYPE: 2	**5. FREQUENCY OF SUBMISSION:** Continually update when necessary.

7. DISTRIBUTION: Via Email to: - Center DOCO - Center DOCOTR	**7. INITIAL SUBMISSION:** Plan submitted with Delivery Order proposal. This plan, as approved by the DOCO, will be included in any resulting Delivery Order.

8. REMARKS:

The Safety and Health Plan is critical for performance of this Delivery Order.

If the Contractor discovers new or unanticipated hazards, or if existing safeguards have ceased to function effectively, the Contractor shall update the Safety Plan, as necessary, within 30 days.

Upon receipt of this Plan, the DOCO/DOCOTR will forward a copy to their respective Center Safety Office for review and comment of any recommended changes.

Following approval of the Plan or revisions thereto by the DOCO, this Plan shall be followed completely by the Contractor in the performance of their work.

DATA REQUIREMENT DESCRIPTION	

9. USE: To monitor safety related issues.	**10. REFERENCE:** • NFS Provision: 1852.223-73 • NFS Clause 1852.223-70 (Ref. Mod to NAS5-98145) • NPR 8715.3
	11. INTERRELATIONSHIP:

13. PREPARATION INFORMATION:

For outline see NASA Procedural Requirement (NPR) 8715.3: NASA General Safety Program Requirements, Appendix E. Sample Safety and Health Plan for Service or Operations Contracts.
http://www.hq.nasa.gov/office/codeq/doctree/safeheal.htm#

The Hazard Analysis and Safety Plan shall describe how the Contractor will follow Federal,

State, and NASA safety standards.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN 2. DRD #: ARMD-02 Page 1 of 3

3. TITLE: Safety and Health Reporting

SUBMITTAL REQUIREMENTS

4. TYPE: 3	5. FREQUENCY OF SUBMISSION: In accordance with Center Safety Office reporting requirements

8. DISTRIBUTION:
For DFRC via email in accordance with Block 12 below to:
 	
    - Center DOCO
    - Center DOCOTR
    - Center Safety Office
 	
For GRC see "Incident Reporting Information System" (IRIS), at URL: https://nasa.ex3host.com/iris/newmenu/login.asp
 	
For LaRC see "Contractor Monthly Accident Reporting" (CMAR), at URL: http://cmar.larc.nasa.gov/
 	
For ARC see "Contractor Monthly Accident Reporting" (CMAR), at URL: http://cmar.arc.nasa.gov/
	7. INITIAL SUBMISSION:
	
	N/A

8. REMARKS:

DATA REQUIREMENT DESCRIPTION

9. USE: To monitor safety related issues.	10. REFERENCE: • DRD ARMD-01 (Safety and Health Plan) • NFS Clause 1852.223-70 Safety and Health, Paragraph (d)
	11. INTERRELATIONSHIP:

14. PREPARATION INFORMATION:

See NFS Clause 1852.223-70 Safety and Health, Paragraph (d).

NOTE: This clause has not been updated yet to include the necessary items needed.
      Therefore, see the next page for the information required if submitting other than web-based reports.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN 2. DRD #: ARMD-02 Page 2 of 3

3. TITLE: Safety and Health Reporting

12. **PREPARATION INFORMATION (CONTINUED):**

QUARTERLY REPORTING

CONTRACTOR_____

CONTRACT NUMBER_____

MONTH_____YEAR_____

# of Employees_____

# of Hours Worked_____

# of Lost Work Time Injuries_____

# of Lost Work Time Injury Days_____

# of Restricted Duty Injuries_____

# of Restricted Duty Injury Days_____

# of OSHA Recordable Injuries_____

# of Lost Work Time Illnesses_____

# of Lost Work Time Illness Days_____

# of Restricted Duty Illnesses_____

# of Restricted Duty Illness Days_____

# of OSHA Recordable Illnesses_____

3. TITLE: Safety and Health Reporting

DEFINITIONS

of Lost Work Time Injuries - Number of injuries incurred by employees, where more than 8 consecutive hours of work were lost.

# of Lost Work Time Injury Day - Number of days lost by employees as the result of an injury incurred while working.

# of Restricted Duty Injuries - Number of restricted duty (light duty) injuries incurred by employees while at work.

# of Restricted Duty Injury Days - Number of days of restricted duty (light duty) incurred by employees as the result of an injury while working.

# of OSHA Recordable Injuries - Number of injuries that required more than first aid treatment but did not result in lost or restricted time, incurred by employees while working.

# of Lost Work Time Illnesses - Number of illnesses incurred by employees, where more than 8 consecutive hours of work were lost, while working.

# of Lost Work Time Illnesses Days - Number of days lost by employees as the result of an illness while working.

# of Restricted Duty Illnesses - Number of restricted duty (light duty) illnesses incurred by employees while working.

# of Restricted Duty Illness Days - Number of days of restricted duty (light duty) incurred by employees as the result of an illness while working.

# of OSHA Recordable Illnesses - Number of illnesses that required more than first aid treatment, but did not result in lost or restricted time incurred by employees while working.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN
		2. DRD #: ARMD-03
		Page 1 of 1

3. TITLE: Mishap Reporting and Close Calls

SUBMITTAL REQUIREMENTS

4. TYPE: 3	5. FREQUENCY OF SUBMISSION: Initial Incident Report - Within 24 hours of mishap or close call. Follow-up Report - Within 10 working days of mishap.

9. DISTRIBUTION:
For Mishap Reporting:
    1 - Center DOCO
    1 - Center DOCOTR
    1 – Center Safety Office
For Close Calls:
    - Via email to DOCOTR
	7. INITIAL SUBMISSION:
	
	N/A

8. REMARKS:

The DOCOTR shall be made aware of any safety-related close calls and potential hazards in addition to mishap reporting.

DATA REQUIREMENT DESCRIPTION

9. USE: To monitor safety related issues.	10. REFERENCE: NASA Procedural Requirements (NPR) 8621.1A (NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Recordkeeping). NOTE: To review this manual in its entirety, see the NASA Online Directives Information System (NODIS) Library at the following URL: http://nodis3.gsfc.nasa.gov/Library/main_lib.html
	11. INTERRELATIONSHIP:

15. PREPARATION INFORMATION:

NASA Form 1627 shall be used for reporting mishaps.

See the following URL to obtain an electronic copy of this form:

https://extranet.hq.nasa.gov/nef/user/form_search.cfm

ARMD 29

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN
		2. DRD #: ARMD-04
		Page 1 of 2

3. TITLE: Service Summary Report

SUBMITTAL REQUIREMENTS

4. TYPE: 3	5. FREQUENCY OF SUBMISSION: Monthly
10. DISTRIBUTION: Via Email to: - Center DOCO - Center DOCOTR	**7. INITIAL SUBMISSION:** 10 working days after the first month following the Delivery Order effective date.

8. REMARKS:

DATA REQUIREMENT DESCRIPTION

9. USE: To track service and areas of concern.	**10. REFERENCE:** NAS5-98145, Paragraph C.5 (Services Required)
	11. INTERRELATIONSHIP: • Delivery Order • NAS5-98145, Paragraph F.1.1 (Level 1 Metrics)

16. PREPARATION INFORMATION:

The Contractor shall prepare a report which includes the following elements as applicable to the Center's scope of ODIN services:

1. Detailed explanation and duration of any downtime or reduced functionality time of the Network. Include the number of seats and NADs affected by this event.

2. Report that provides detail associated with how service delivery and availability are calculated. Specifically, the report shall indicate the downtime associated with late deployment of patches and software updates.

3. Break-out of items (seats or network services) not returned to service within required time frame, including item description, downtime, and rationale. Include price reduction calculations which are also to be included in monthly invoice supporting report.

4. Report of phone services, including long distance usage, cellular phone usage, and trunk line utilization and traffic analysis. The Contractor shall perform traffic analysis on telephone system trunk groups for 1 week of every month, including collection of traffic statistics, calculation of actual grades of service, analysis of configurations required to provide targeted grades of service, and generation of monthly and annual usage summaries and traffic analysis reports. Include report of actual phone bills versus Delivery Order price for monthly non-cellular phone services.

5. Statement of percentage of Priority Service Seat calls, and Priority Service Problem calls broken out by Center-specific organization.

6. Summary, by Center-specific organization, of all Moves, Adds, and Changes (M/A/Cs) completed that month, with cumulative M/A/C's by organization listed for the 12-month year.

3. TITLE: Service Summary Report

* 7. Report of network traffic vs. time for major components of the network, including backbone, isolation ring, segments, and interswitch links. These reports shall be available on a daily, weekly, and monthly basis.
8. By seat type, the number of desubscriptions and new subscriptions.

_____

* Electronic Query Only.

AD HOC REQUESTS:

In addition to the required reporting requirements, ad hoc requests may be issued when:

1. The Contractor is the only or primary source for the required information.
2. The total time to obtain and prepare (compile/format) the required data is less than 8 person-hours.

Examples of ad hoc requests of this nature may include (but are not limited to):
- Number of hits on a contractor supported web server
- E-mail usage statistics
- Total file storage usage statistics
- Network printer usage statistics
- Hardware and software configurations at the desktop level
- Network utilization over a time period
- Network traffic statistics
- Seat history information.

The contents of the report shall completely address the ad hoc information request. The data shall be compiled and formatted in a concise and easy to understand way including full and summary/rollup formats whenever appropriate.

The Contractor shall submit the reports electronically, via electronic mail or CD-ROM, in a mutually agreeable/interchangeable spreadsheet format.

Data will be reported at a level specified in the request.

Unless otherwise agreed upon for the particular request, the Contractor shall deliver the information/report within 5 working days of the request being submitted by the DOCOTR.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	DATA REQUIREMENT DESCRIPTION (DRD)	1. RFP #: ODIN 2. DRD #: ARMD-05 Page 1 of 2

3. TITLE: Technology Implementation Plan

SUBMITTAL REQUIREMENTS

4. TYPE: 3	5. FREQUENCY OF SUBMISSION: Monthly - Due on the 10th business day of each month.
11. DISTRIBUTION: Via Email or Available Electronically to: - Center DOCO - Center DOCOTR	**7. INITIAL SUBMISSION:** April 13, 2007

8. REMARKS:

This DRD provides NASA with the ODIN Contractor's plan for implementing both hardware and software at each of the centers. The Implementation Plan(s) shall provide sufficient detail of deliverables, milestones, and schedules. The Plan(s) shall clearly identify specifics related to implementation activities and timeframes for the implementation. The Plan shall also identify the technology evaluation activities that are used by the ODIN Contractor to ensure that the technology item is ready for production implementation and that all risk factors have been mitigated. The Plan(s) shall be a rolling plan that consists of a minimum of 12 months of required information, but not to exceed the length of the Delivery Order. Adjustments to the Plan(s) shall require both Government and Contractor concurrence. Within 10 business days of receiving each monthly plan, the DOCOTR will inform the Contractor if changes to the previously approved milestones and deliverables are approved.

DATA REQUIREMENT DESCRIPTION

9. USE: This DRD will provide the Government with sufficient insight into the planned software upgrades, hardware refreshes, infrastructure and tool set improvements, and implementation of previously approved technology infusion projects.	10. REFERENCE: ● NAS5-98145, C.4 (ODIN Operating Model) ● Delivery Order
	11. INTERRELATIONSHIP:

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	**DATA REQUIREMENT DESCRIPTION (DRD)**	**1. RFP #:** ODIN **2. DRD #:** ARMD-05 Page 2 of 2

3. TITLE: Technology Implementation Plan

---

17. PREPARATION INFORMATION:
For each implementation item, the Plan shall include at a minimum the following:

1. Purpose
2. Objectives
3. Scope
4. Implementation approach
5. Key roles and responsibilities
6. Dependencies (internal, Mission, Agency, Center, Customers, Policy, Vendors, etc.)
7. Impacts to end users
8. Outreach approach
9. Risks
10. Risk mitigation for each risk
11. Quality assurance approach
12. Relevant standards, documentation, policy, etc.
13. Milestones and deliverables (listed chronologically in tabular format)
14. Change log (for narrative portion of plan)
15. Project Schedule with baseline versus changes

Additionally, a consolidated Gantt chart showing the start date, end date, milestones, and deliverables associated with each implementation effort shall be required. The chart shall preserve the baseline for each implementation effort until completed. Updates to the chart shall be easily identifiable and be made in such a way as to facilitate comparison to the baseline. Progress against the most recent version of the Gantt chart is shown each month.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ARMD	**DATA REQUIREMENT DESCRIPTION (DRD)**	**1. RFP #:** ODIN **2. DRD #:** ARMD-06 Page 1 of 1

3. TITLE: Backup Subscription Service Status

SUBMITTAL REQUIREMENTS	
4. TYPE: 3	**5. FREQUENCY OF SUBMISSION:** Every 2 weeks.
12. DISTRIBUTION: Email electronic copy in Excel Format to Center DOCOTR or Available electronically	**7. INITIAL SUBMISSION:** N/A

8. REMARKS:

DATA REQUIREMENT DESCRIPTION	
9. USE: This report will enable the DOCOTR and organization POCs to ensure the backups are properly subscribed for backups and verify that the service is being performed on a regular basis.	**10. REFERENCE:** • NAS5-98145, E.3.1.16 (Local Data Backup and Restore Service)
	11. INTERRELATIONSHIP:

18. PREPARATION INFORMATION:

The report shall contain the following information for seats that have not had a successful backup in 30 days:

1. Customer Organization
2. ODIN tag number
3. Customer Last Name
4. Customer First Name
5. Platform type (Mac/PC/Unix)
6. Subscribed backup service level (excluding "none")
7. Confirmation (yes/no) that the customer has been contacted, via email, by the ODIN Contractor to make arrangements for reestablishing the backup service
8. Any applicable comments

Both sections of the report shall be sorted by organization.

PART I. GRC ADMINISTRATIVE DATA

1-11 RESERVED CORE
12-16 RESERVED (BLANK)
17-29 RESERVED ARMD

30. **GRC Delivery Order Value – GRC Attachment A**
The total estimated value of this Delivery Order is **$35,739,013.00.**

The unit prices set forth in GRC Attachment A Price Model **[GLENN-PRICE-TABLE-031307-Updated Final Price Model -550pm.xls]** are applicable to the services ordered under this Delivery Order. The Price Model shall be maintained and made electronically accessible to the Government.

31. **Asset Transition Value for Infrastructure Upgrade Proposals (IUPs):** - IUPS MAY BE PUT IN CORE Part I Section 10 Asset Transition Value Methodology with Contractor to Propose
At the Government's discretion, at the conclusion of the current Delivery Order, the ownership of all components, materials, and data required for the implementation and operation of IUPs included in the seat cost, including the long-term storage media, shall be transferred to the Government for a total additional cost of $1.00. The Contractor shall provide an appropriate asset transition value of IUPs included in the seat cost in the event the Delivery Order is terminated earlier than 36 months using the approved ATV methodology. All IUPs not included in the seat price become part of the infrastructure and therefore are property of the Government.

32. **GRC Support for Excess of Government-Owned Property**
The Government will maintain property records for all Government-owned property. The ODIN Contractor shall pick-up all ODIN supported Government-owned equipment identified for excess by end-user organizations.

For desktop systems, prior to pickup, the ODIN Contractor is required to verify that user data is properly dispositioned in a process approved by the DOCOTR. After pickup, the hard disk must be sanitized in accordance with existing policies and procedures.

Items shall be turned over to the Center Property Disposal Officer's representative at the on-Center location that the Center Property Disposal Officer delegates.

33. **Maintenance of IUPs from the Previous Delivery Order**
For IUPs that were completed during the previous ODIN Delivery Order, the costs for any related ongoing maintenance activity shall be handled according to the following:

All costs shall be included in ODIN seat prices.

Part II. GRC CENTER REQUIREMENTS

Section A. GRC General Requirements

1-14 RESERVED CORE
15   RESERVED CORE/ARMD
16-19 RESERVED (BLANK)
20-22 RESERVED ARMD

23. **Asset Management Database**

    A copy of the Delivery Order Asset Management Database shall be archived monthly, on approximately the 15th of each month, for future reconciliation purposes, and this data shall be retained for the life of the Delivery Order. The ODIN Contractor shall update the database on a real-time basis based on Government-approved changes. This database shall include all services, along with quantities and pricing for each, included in the current Delivery Order. Monitor SLA asset data shall be included for each seat asset with a monitor SLA. The DOCOTR and all official organizational ODIN Point of Contacts shall have network access to the Delivery Order database archive. Additionally, a complete set of all monthly archives shall be provided to the DOCOTR at Delivery Order completion.

24-32 RESERVED ARMD

33. **ODIN Model and Services Training**

    The Contractor shall offer ODIN Model/Services training to those who have not been exposed to ODIN, such as temporary staff. This training shall be provided using at least two methods.

    a. Information shall be provided on a continuous basis to all GRC staff on the ODIN Web page about ODIN and the services that it provides.
    b. Instructor-led training shall be provided in a training center located at an on-site or near-site facility.

    Classes shall be available on a regular basis at no charge for new GRC staff and temporary employees. During periods where the amount of temporary staff is large, May and June for summer students, the Contractor shall hold as many classes as required to accommodate the need. The Contractor shall work with the GRC Personnel Office to ensure training coverage shall be provided during the periods that may require extended capabilities. The Contractor shall offer ODIN Model/Services training as a part of GRC's new employee orientation process, shall offer short focus sessions for training for new applications, and shall offer training seminars for familiarizing users with replacement systems.

34. **Cable Plant Management - Master Contract Section A.1.10**

    The Government will retain ownership of the entire cable plant at Glenn Research Center including any satellite facilities (e.g., Plum Brook at GRC). The cable plant includes the cabling and network infrastructure for the telephone systems, the local area networks, the video distribution system, intercom systems, and other special circuits and systems.

    All conduit, cable trays, messenger cables, telephone poles, underground ducts, manholes, communications racks, mounting panels, patch panels, wall plates, and other media installed to support the plant will remain under Government ownership as well as all fiber, copper, coax and other types of cable that comprise the plant. All switches, concentrators, routers, hubs, repeaters, converters, transceivers, bridges, splitters, taps, connectors, wireless access points, transmitters, and other network devices that constitute the cable plant will remain the property of the

Government, including the telephone switches, voice processing system, and associated telecommunications equipment. All documentation, including as-built drawings, pertaining to the cable plant will belong to the Government.

While the government will retain ownership of the cable plant as described above, the Contractor shall have full cable plant management responsibilities. Specifically, the ODIN Contractor shall operate, maintain, and provide configuration management of the cable plant to provide the desktop, telecommunications, and networking services required under the contract. These services include all intra (within) building (including desktop to wall plate) and inter (building-to-building) building connectivity. The Contractor shall also be responsible for the configuration management of cable plant items provided by ODIN for other organizations. This includes the acquisition, installation, testing, operation, documentation, preventative and remedial maintenance, repair, capacity planning, upgrades, demolition, removal, disposal, and excessing of cable plant components.

As a part of the Contractor's obligation to operate and manage the cable plant, the Contractor shall be responsible for funding and furnishing any equipment needed to maintain service delivery in accordance with the requirements and metrics in the Delivery Order. Any new equipment added by the Contractor to the plant will become the property of the Government. NASA tagged equipment removed from service shall be excessed, and new equipment tagged, per established procedures.

In performing work on the cable plant, the Contractor is responsible for adherence to all applicable laws, codes, regulations, and standards. Penalties or fees assessed by external organizations (e.g., OSHA) associated with violations performed by ODIN shall be borne by the ODIN Contractor. The Contractor shall coordinate cable plant work with other center organizations and contractors as directed by the Government to avoid disruptions to the center community and to minimize system(s) downtime. It is the Contractor's obligation to leave all work areas in a cleaned, finished state at the conclusion of any work. All work performed on the cable plant shall be documented by the Contractor consistent with the guidelines in the documentation section contained herein.

The Contractor shall perform preventative maintenance as part of its cable plant management responsibilities. Preventative maintenance shall consist of:

a) Each manhole shall be inspected at least once every 2 years. Any evidence of damage or issues will be documented and provided to the Government.

b) Additional inspection of manholes will be conducted in response to evidence of problems.

c) Cabling infrastructure (e.g., building entry points, communications cabinets, punch panels) shall be inspected at least once during the Delivery Order. Any evidence of damage or issues will be documented and provided to the Government.

35. **Uninterruptible Power Supply (UPS) Units**

Over the course of the delivery order, the contractor shall inspect all UPS units that power network Infrastructure equipment at GRC. Units that do not pass inspection (i.e. do not work without AC power), shall have their batteries replaced or have the entire UPS unit replaced; whichever is the most cost effective.

36. **Meeting Place Conferencing**

The contractor shall provide maintenance and operation of the GRC Cisco Meeting Place voice conferencing service currently in use at GRC. The Contractor shall provide monthly usage reports in accordance with DRD GRC-08.

The contractor shall upgrade the service to operational status with the latest hardware and software platform offered by the vendor no later than 6 months of the Delivery Order award. This Infrastructure Upgrade Proposal shall include 48 additional ports and 2 accompanying ISDN circuits obtained from a local telephone company. The cost of maintenance and the upgrade shall be bundled in the phone seat cost, excluding PCELL and MC seats. The Government will obtain a toll free number to access this service and the contractor shall make the Meeting Place Service accessible via the toll free number.

37. **Internet Gateway Spam & Virus Filtering**

With the migration of the messaging infrastructure to NOMAD, most of the human-to-human electronic mail will be routed by the NASA Post forwarders directly to Exchange. This will significantly reduce the volume and content of messages crossing the GRC email gateway. Remaining will be machine-to-machine traffic along with legacy mail still being sent to @grc.nasa.gov (or @lerc.nasa.gov) addresses.

GRC intends to continue providing protection from unwanted and malicious mail. The Contractor shall provide Internet mail gateway protection from viruses, spyware, spam, phishing attacks, botnet attacks and other unwanted message traffic.

Gateway filtering shall have the following minimum characteristics:

a. Ability to identify, evaluate and monitor new mail messages for non-productive and malicious code at the gateway using heuristic tests.

b. Multi-tiered levels of filtering sensitivity, adjustable by the service administrators

c. Ability to quarantine or delete detected spam at the gateway preventing downstream congestion.

d. Ability to tag incoming e-mail with a header (e.g., X-SPAM) that end-users can subsequently utilize to vet mail into a SPAM or JUNK mail folder.

e. Customizable filters that enable service administrators to create domain- and IP-level blacklists and whitelists as well as lock out entire ranges of IP addresses.

f. The configuration of the spam detection and filtering software shall be maintained to average a monthly false positive rate of less than .5 percent.

g. Anti-spam filtering definitions can be automatically updated in an unattended manner during non-work hours.

The actual configuration of the gateway filters will continue to evolve over time as service administrators gain experience and adapt to emerging threats. The Contractor shall provide summary reports, briefings, and recommendations to the GRC Postmaster at weekly intervals in accordance with DRD GRC-09 in an effort to ensure that gateway filters are performing as expected and improve the effectiveness of the service.

38. **Infrastructure to Support New Users**

For this Delivery Order there are two measures that are used to define the requirements: "Capability" and "Capacity". For the purposes of this requirement, infrastructure is defined as "the active and passive components used to transfer information between two points." Infrastructure

includes, but is not limited to, cable plant, premise wiring, phone switch, routers, hubs, concentrators, Ethernet switches, wireless access points, and antennae.

The Government is responsible for providing the capability **while the ODIN Contractor is responsible for ensuring the** capacity **to meet the seat requirements.**

For this Delivery Order, the terms "capability" and "capacity" are defined as follows:

   a. Capability is the state of being able to provide an ODIN service such as a network or telephone.

   b. Capacity refers to the volume of a particular service that can be provided by the capability that is in place.

If a capability exists within a facility, the Contractor is responsible for expanding the capacity to fulfill associated seat requirements, up to the maximum capability that is in place. If the infrastructure has reached maximum capacity or if the requirement cannot be handled by reconfiguration of existing equipment, the Government is responsible for augmenting the infrastructure to provide the capability necessary to provide additional service.

39. **X.500 Directory Service Infrastructure**

The Contractor shall provide support, operation, and maintenance for the Center's X.500 Directory Service Infrastructure in accordance with the current version of NASA-STD-2807 (The NASA Directory Service - Architecture, Standards, and Products) and other applicable Agency policy.

At a minimum, the Contractor shall update the Center's X.500 directory daily. Upon request by the DOCOTR or designee, the Contractor shall perform additional updates as required. The Contractor shall perform daily backup and provide the capability to restore all data (e.g., digital certificates). The Contractor shall make the X.500 data electronically available to DOCOTR or designee upon request.

NASA is migrating to a new centralized directory that will augment and eventually replace the current X.500 directory. This activity is scheduled to occur during the life of this delivery order which will be a change to the existing Directory Service Infrastructure.

The Contractor shall support this migration by maintaining an awareness of these developments in the Agency forums in which they are discussed. The Contractor already participates in these forums as a result of its other service delivery functions. In addition, the Contractor will provide access to the data contained in, and information regarding the configuration of, the GRC X.500 directory service, upon DOCOTR request, to NASA Centralized Directory personnel in preparation for the migration to the Agency Central Directory service. The Contractor X.500 support staff will coordinate the disabling of GRC X.500 services and the alteration of current X.500 processes and minor changes to other Contractor supported email infrastructure components in support of the transition to the Agency Centralized Directory, commensurate with the capability and resources of the current operational staff. In the event that significant reengineering is required to meet government requirements or schedule for transition to a Centralized Directory, the DOCOTR will execute an Infrastructure Upgrade Proposal. However, decommissioning of no longer required GRC X.500 services will be deemed as a normal part of operational support for these services during this Delivery Order.

The Contractor shall support the Agency Enterprise Directory Change Request (CR) process for the submission of center unique requirements through the GRC CIMS CCB representative or designee.

40. <u>Domain Name Service (DNS)</u>

As part of ODIN network services, the ODIN Contractor shall maintain central domain name service (DNS) for the network that is compatible with current network naming and addressing scheme and provides the most efficient routing of traffic. Over the course of this delivery order, it is anticipated that NASA will establish a standards document. The contractor will be required to maintain and enhance the center DNS as defined in this document, once approved.

41. <u>Back Office Support</u>

The following components shall be included as part of what is defined as "back office" products and services: NOMAD electronic messaging service (includes calendar, scheduling, email, and instant messaging), network time service, web services, client access and hosting of user information in directory services, MS Windows Domain membership and services, network hostname /address resolution, central Network File System (NFS) namespace, maintenance of a user's uniquely identified username and UUPIC, SMTP Internet Gateway spam, virus, and malicious code filtering, USENET news reader and access to the GRC USENET news server, and access to any institutionally provided (for general use) NASA or GRC network based infrastructure service.

The Contractor shall include back office support as part of the NAD service. Additionally, all NADS shall receive the same anti-virus: protection (client and server) software, licenses, access to virus definition updates, and Help Desk problem resolution, provided to full ODIN seats. The ODIN help desk shall provide users assistance for electronic messaging, Internet browsing, and other back office products and services to all ODIN seats in accordance with the Center-required supported software. The Government will purchase all client application licenses (excepting anti-virus software which will be provided by the Contractor) for NADS. The Contractor shall make all the software available to NAD users.

42. <u>Windows Terminal Server Environment</u>

The Windows Terminal Server System (WTS) service is an integral component of the GRC Domain. This service has been designed with the following goals and philosophies:

- Provide a service that enables the UNIX and X Terminal community to access an ODIN Desktop seat environment from their primary desktop.

- Provide MAC and Remote Access Service (RAS) users access to NASA GRC standard Windows-based applications (e.g., Human Resources Information System).

- Obviate the need to centrally-deploy client software to the MAC and UNIX desktop by leveraging services and industry standard protocols that are available to MAC and UNIX.

- Provide local printer and local drive mapping capabilities to workstations accessing the WTS environment.

- Minimize capital and support costs for the RAS community by leveraging thin-client computing technologies, such as the Independent Computing Architecture (ICA)

- Enable access to NASA GRC standard Windows-based applications (e.g., Human Resources Information System) from non-Windows desktops

The WTS service is provided by multiple Intel-based servers. Each server is identically configured in terms of functionality and user look-and-feel. The redundancy in the WTS server farm helps to distribute user load and ensure uninterrupted availability in the event one, or more, of the servers

becomes non-functional. In terms of functionality, there is no differentiation between each of the servers, and from the user perspective it does not matter which system provides the service.

No user data is maintained on the WTS servers themselves. WTS hard drive storage is used for the operating system applications. Write access is prohibited on the WTS hard drives, by employing NT File System (NTFS) permissions. All servers front-end virtual server file services, for the purposes of storing user specific files:

- User Home Drives: Each user has their own file servers provided My Documents redirected folder. User Home Drives are automatically mapped during the logon process. Home Drives are used for storing user data, user specific configuration files, and certain application customization support files.

- WTS Profile server: All WTS servers are back-ended by a server called the WTS Profile server. This server provides storage for User profiles that preserve user-specific customizations such as desktop schemes, printers, network drives, and screen geometry. Because all WTS servers front-end this profile server, users profile settings "roam" regardless of which WTS server the user is accessing.

The WTS service is provided to the user in the form of a "logon session." Each server is a member server in the single Center Master Domain (GRC). Logon authentication is provided via the GRC Domain.

The WTS system shall be configured to provide all CORE standard software load applications (CORE Delivery Order attachment C) , GRC software overlay applications, and additional applications as approved by the ODIN DOCOTR or designee.

The following table is a current listing of installed applications on WTS

WTS Application Listing Table:

General Application

APRS	CICS
E-Forms	Eudora (to be replaced by Outlook)
Free Agent (to be replaced by Outlook Express)	Ghostscript
Gsview	Internet Explorer
MS Access	MS Excel
MS PowerPoint	MS Project
MS Word	Netscape (to be replaced by Mozilla Firefox)
SAP	TSO
VTAM	

Business Applications

	Aero Grants
Bulk Funding	Chemical
Data Warehouse	Drawings
Drawings Plum Brook	EMAP
End Node	Escort
Fireplan	HRIS
JETS	MDLS
PhonePool	PSR
Sybase Password	

Utilities	
Adobe Reader	DSU
Imaging	MS Paint
Phone Book	QuickTime Player
QuotaCheck	ReView
WinDirStat	Windows Media Player
WinZip	

Programs installed at user requests:

Remedy
WMS 7i

The WTS system shall be configured to provide access to ICE/Craddle applications through WTS, primarily Document Publisher.

43. **Shared Peripherals**
   a. For all seat types, color print services are not provided as part of shared peripheral service I levels. (Color print services will be purchased as needed from the Catalog.)

   b. The definition of Shared Peripheral Services is revised to be: Provides access to shared black & white printers. Networked black & white print services shall support, at a minimum, 600 dpi, Postscript Level II, 20 pages per minute plain text, and capability of printing transparencies. All new printers delivered during this Delivery Order period of performance shall be duplex enabled (non-manual). Refreshment of shared black & white printers shall occur at least every 5 years with no more than a 3 year average for all shared black & white printers OR when utilization of a given black & white printer reaches 80% of the Recommended Service Interval, RSI. The RSI is when the manufacturer recommends major component replacement, and is based on utilization (i.e., number of pages printed).
   c. The contractor shall provide higher PPM and paper capacity for devices in areas with high customer utilization of the printer.
   d. The contractor shall inventory and maintain an accurate listing of all ODIN provided printers and their locations. Records should identify attributes such as: make/model, service start date, RSI status, and print queue name. Records shall be made available upon DOCOTR request.

   e. For all full seats and NAD seats
      i. Basic is standard

   f. Service levels for black & white shared peripheral services are:
      ii. Basic: B&W services within 150 feet on same floor
      iii. Regular: B&W services within 60 feet on same floor
      iv. Enhanced: B&W services within 30 feet on same floor
      v. Critical: B&W services within office/cubicle on same floor

   In all cases, distances shall be measured in "walk-able" feet, i.e., the measured distance between the peripheral and the desktop must be along a regular walked path.

44. **Software Eligible For Home Use**
   The Contractor shall provide, upon request by any ODIN desktop seat customer, current Center defined software that is designated below as "available for home use." This includes providing software version updates when they become supported by the Center. Software shall be provided to the user within 2 workdays of the request. The Contractor shall also develop detailed

instructions for home installation and provide a software distribution mechanism. The cost for meeting this requirement shall be included in the standard desktop seat price.

Center	Software	Platform
GRC	Symantec Anti-Virus	PCs/MACs
	Microsoft Office Professional	PCs/MACs

45. Local Video System Services

The Contractor shall support the existing video services infrastructure for video distribution and video teleconference services at the Center, specifically:

a) Providing preventative and corrective maintenance and operation of the Center headend and all related equipment, including VHF, UHF, and satellite antennas; cable plants; all cable plant hardware; and distribution of video services to the Center's TVs and monitors. The Contractor shall provide management and support for the number and type of video system drops active at the start of the Delivery Order period of performance. Relocation or reassignment of existing connections and addition of new video connections to TVs and monitors shall be available in the catalog.

b) Receiving, videotaping, and distributing satellite downlinks and TV newscasts and other video programs, and for supporting satellite uplinks and other TV broadcasts.

c) Monitoring of all channels to ensure correct programming.

d) Review and schedule all requests to broadcast programming.

e) Broadcast programming at scheduled times included prerecorded video, live video, and conferencing as appropriate and/or requested.

f) Test all equipment regularly to comply with the Center's ISO/Quality Management System

g) Coordinate all equipment repairs and maintenance.

h) Perform all work as per relevant safety and electrical codes.

i) Maintain documentation to include an updated environment description and drawings of the headend and LINK system.

46. Data Facilities Support

GRC develops and maintains steady state data acquisition systems, central data collection systems and experimental data post-processing systems. These data systems consist of computers, network components and data acquisition hardware to support the experimental test facilities at the Glenn Research Center and the Plum Brook Station Site. The support services for these mission critical systems are currently provided under the performance-based PACE contract. These services include preventative and remedial hardware maintenance, installation, removal, calibration, engineering revision maintenance, component fabrication, operation, specialized system administration, application development and configuration management. Currently, ODIN support for these systems are primarily limited to providing LAN connectivity and initial (Level 1) help desk activities. The Contractor shall support the ODIN Project Office in these efforts.

47. Patchlink

Patchlink is an Agency standard software (CEI) component for which the Government will provide all licenses. The Government uses a Patchlink Update system for reporting compliance with agency patch management and configuration requirements.

Patchlink can also be used for installing and maintaining patches. Should the ODIN Contractor wish to further extend the functions of the Center Patchlink infrastructure (e.g. to add patch installation and maintenance where currently only reporting is done), approval must first be obtained from the DOCOTR.

At GRC, the ODIN Contractor is responsible for the operation and maintenance of the Patchlink server, and of Patchlink clients on full ODIN seats. Ensuring that NAD systems install the agent and report via Patchlink to the common Patchlink server, and the compiling of Agency Patchlink reporting data, will be the responsibility of government staff or NASA designated non-ODIN contractor staff. The ODIN contractor shall provide full read and query access of the Patchlink data collection to the ODIN DOCOTR or designate.

48. **Director's Leadership Team Dedicated Enhanced Support Professional (DESP)**
Given the widespread use of ODIN services by the GRC Directorate Leadership Team (DLT) and the Executive Assistant Leadership Team (EALT) in the performance of critical, high profile Center functions that directly impact the operation of all organizations at GRC, the Contractor shall provide enhanced dedicated support to this body of Administration Bldg (Bldg 3) ODIN customers. The ODIN contractor shall provide this service within 60 days after the start of this Delivery Order. This service will be funded as a bundled cost to all subscribed ODIN full seats and NAD's. The ODIN DOCOTR or designate shall be the primary sponsor of the DESP.

Suitable office space will be provided by the government for an ODIN Dedicated Enhanced Support Professional to be co-resident within Bldg 3. This DESP will be highly knowledgeable of the GRC ODIN Windows and Macintosh desktop and laptop systems, Mobile Computing seats and their use in the GRC environment, as well as the full range of institutional services. The DESP shall be able to complete tasks with minimal supervision, have strong customer service and communication skills, have attention to detail, and the ability to work in a team oriented environment. The DESP will provide direct and immediate ODIN system support, improving the effective use of ODIN services requested by senior GRC management and provide guidance to adjust or obtain ODIN services when requested. The DESP will assist and facilitate support during transition of ODIN services and upgrades. Flexible work hours and or competent backup staffing may be required in order to provide support coverage during normal daily activities.

The DESP may be called upon to perform occasional support of senior GRC management in other locations or traveling executives from other ODIN-supported Centers while here at GRC. The DESP may be asked to assist in arranging temporary ODIN services to the Ad Building in support of GRC-sponsored special events. The DESP shall work closely with OCIO staff also responsible for providing hands-on assistance to Ad Building personnel.

The pricing of this service shall include appropriate consideration for the fact that GRC DLT and EALT end user systems are generally not subscribed for the highest level of ODIN system hardware and software maintenance available. The visibility of this position provides the Contractor with a unique opportunity to showcase its services and support to both GRC and other NASA executives, as well as visiting government, industry and academic leaders.

49. **PKI Support**
PKI support shall be considered as a Triage 1 service, in which the government provides the licensed software, and the Contractor shall assume responsibility for management and support for the environment. The exception to this is Entrust Entelligence, which is part of the ODIN Standard Software Suite. For Entrust Entelligence, the Contractor shall provide full support as part of the ODIN Standard Software Suite. Support for the environment shall include back-office support, certificate management, and Secure ID tokens. The Contractor shall participate in the Trust Model Working Group.

50. Environment Description Documents

The Contractor shall maintain documentation for systems under their support and shall maintain the GRC Environment Description Documents for ODIN supported systems as part of the fixed seat price. The Environment Description documents shall be updated on a quarterly basis from the start of the Delivery Order. All documents shall be made centrally available to the ODIN DOCOTR's or designate.

51. Limitation of Annual Escalation Costs

Annual escalation costs for the following shall be held flat with no increases during the delivery order:

    a) MC seats and service levels
    b) File1 seats and service levels
    c) PCell seats and service levels
    d) Fax seats and service levels
    e) All monitor service levels

Section B. GRC Computer Seat Services

1-8 RESERVED CORE

9. Computer Seat Changes

Computer seat type changes shall be supported in the following ways:

    a. Concurrent with a seat's hardware tech refresh, a request to change seat type shall be implemented without an additional or one-time refresh charge.
    b. Outside of regularly-scheduled hardware refresh, seat changes shall be supported through early refresh catalog items.
    c. Upon DOCOTR request, the Contractor shall support seat changes without additional charge for up to 1% of the total number of desktop, laptop, and workstation seats per year.

If the Government changes a seat type or service level during the Delivery Order (e.g., from a Desktop seat to a Laptop seat for a person moving from a traditional desktop system to a portable system with a docking station), the monthly seat price shall change to the existing cost of the new seat type, but no one-time cost shall be levied. Upon request, the DOCOTR will have the responsibility to ensure that seat change requests of this type are needed to meet mission requirements.

10-21 RESERVED CORE

22. Workstation UNIX Seat Description

Functionality: Workstation UNIX is the SUN system intended for application development and execution of higher performance scientific and engineering programs, making it a top performance system capable of supporting specialized resource intensive applications. The computer and all associated services are capable of meeting a wide range of scientific and engineering needs. Functionality includes the capability of running high-end UNIX specific applications which require higher levels of performance than those at the Desktop or Workstation seat with the Linux architecture service level. Additionally, for all workstation seats the Contractor shall provide smartcard readers that meet the standards expressed in the National Institute of Standards and

Technology (NIST) 800-96, PIV Card / Reader Interoperability Guidelines or otherwise specified by the DOCOTR or designee.

Service Description: Provides the appropriate hardware, system & application software and associated services (maintenance, system administration, customer support/help, etc.) to ensure that the required functionality of the specific service level is delivered.

Service Levels	Typical Service Characteristic
Entry Level	Entry level functionality
High End	High End functionality

Standard Services:

Service Type	Service Level	Typical Service Characteristics
Platform	Entry	Entry level functionality
Monitor	Premium	Two inch viewable size larger than standard (19")
Architecture	SUN	SUN architecture
Application Software	Regular	Standard CORE S/W
HW Maintenance	Regular	Restore to service by close of next business day
Systems S/W Maint	Regular	Restore to service by close of next business day
Application S/W Support	Regular	Restore to service by close of next business day
Hardware Refreshment	Premium	System replacement every 3 years
Software Refreshment	Regular	Replace S/W load every 12 months
Moves/ Adds/Changes	Regular	<= 5 moves/adds/changes completed within 2 work days
LAN Services	Basic	Provide access to the existing infrastructure capability
Int. Cust. Support/Help	Regular	Full, 12x5 6 AM to 6 PM
Training	Basic	Familiarization with major upgrades as (identified in MC 3.5.2)
System Administration	Regular	User ID, S/W distribution, Config. Mgmt.
Shared Peripheral Services	Basic	Access to network printers
File Services	Basic	Center standard server space
Local Data Backup and Restore	Basic	User data backup weekly
Desktop Conferencing	None	No desktop conferencing services
Account Services	Basic	Directory account services normally provided with the ODIN standard seat
E-mail Service	Basic	E-mail services normally provided with the ODIN standard seat (includes Live Communications Server (LCS) account in NOMAD)
E-mail Storage	Basic	Fixed amount of e-mail storage space.
Loaner Pool Management	None	No loaner pool management services

GRC UNIX Workstation Service Variations:

GRC UNIX Workstations with SGI Architecture. The government terminated the maintenance contract with SGI on 9/30/2006. SGI architecture was not continuing to meet GRC UNIX users requirements and the cost has become prohibitive. SGI platforms shall not be offered as new or refresh systems at GRC. The ODIN Contractor is fully responsible for supporting the SGI legacy systems with full hardware maintenance and software maintenance with the most current SGI versions available until the user has migrated to another option. The ODIN Contractor will not charge an early refresh fee when a current SGI Workstation user with an SGI machine requests to move off the SGI system to one of the options listed in the GRC UNIX Workstation Refresh and New Seat Options. If the Government requires continued use of any SGI system, the Government may optionally continue ODIN service as a NAD or MA2 seat and the asset will be transitioned back to the government using applicable ATV clause.

23-35 RESERVED CORE
36-40 RESERVED (BLANK)
41-44 RESERVED ARMD

45. **GRC Technology Refreshment (Hardware) – Master Contract C.7**

At GRC, hardware refresh shall be done via mass refresh installations scheduled over a 3-month period of time (i.e., July through September) each year based on the April Attachment R as long as the minimum seat performance level exceeds the current quarter performance ratings.

46-47 RESERVED ARMD

48. **GRC ODIN Standard Application and Triage Software**

For any product on the ODIN CORE Standard Software Load list in CORE Attachment C the Contractor shall provide the following services within the basic seat cost (i.e., does not require any additional purchases off the CSCC or elsewhere):
a. Product purchase
b. Installation and integration
c. Full help desk support including knowledgeable technical user consultation
d. Accessible by all "full support" Computer seats
e. Maintenance and refreshment according to the subscribed service levels
f.   Version and Release upgrades, including installation

For any product on the Triage Level 1 list in GRC Attachment C the Contractor shall provide the following services within the basic seat cost (i.e., does not require any additional purchases off the CSCC or elsewhere):

a. Installation and integration
b. Full help desk support including knowledgeable technical user consultation
c. Accessible by all "full support" Computer) seats for any seat that a license is provided

For any product on the Triage Level 2 list in GRC Attachment C the Contractor shall provide the following services within the basic seat cost (i.e., Does not require any additional purchases off the CSCC or elsewhere):

a. Installation and integration
b. Trouble ticket management and redirection to non-ODIN service provider for problem resolution
c. Accessible by all "full support" Computer seats for any seat that a license is provided

During technology refresh, the Contractor shall make a best effort to reinstall <u>Triage Level 3</u> software. No additional purchases (i.e., catalog or other, are required for these services).

49-54 RESERVED ARMD

55.   Desktop File Services – Master Contract E.3.1.15

The amount of server file space per user associated with the file services service levels is: None = 0 MB; Basic = 200 MB; Regular = 2x; Enhanced = 5x.

56.   NASA Operational Messaging and Directory [NOMAD]

NOMAD (previously "COM") is the Agency Messaging environment of which GRC is a full participant.   NOMAD provides an integrated email, calendar, scheduling, and task management solution to NASA users.   NOMAD is based on Microsoft's Exchange service and is accessed using Microsoft Outlook on Windows PCs, Microsoft Entourage on Macintoshes, and Mozilla Thunderbird on UNIX, Linux, and other systems. NOMAD includes integrated services for mobile users. Outlook Web Access (OWA) provides secure remote access to mail, calendars, and tasks from anywhere using a web browser and an Internet connection. Outlook Mobile Access provides support for Smartphones and wireless devices.   In addition, GRC users now have access to a secure instant messaging service (Windows Messenger) further enhancing communications with other NASA NOMAD users. The Glenn Research Center has elected to implement NOMAD to fulfill messaging requirements. Handheld PDA type devices, whether government or ODIN provided, that connect directly to user systems for the purpose of calendar and contacts synchronization shall be provided installation and configuration support as a part of the primary seat type subscription.

It is GRC's requirement to be a "customer" of this service, implementing the NOMAD infrastructure, recommended clients, and support infrastructure necessary to fully integrate with the Agency environment.   Locally unique augmentations or modifications to the NOMAD environment are discouraged and must be discussed with and approved by the DOCOTR prior to implementation.

GRC provided funding to an Infrastructure Upgrade Proposal to implement and provide support for the agency messaging environment. The "COM IUP" was used to help build the infrastructure and ensure proper sizing, ongoing licensing, and continued support through the end of Delivery Order 3. A local IUP augmented the central COM IUP and included support for the GRC migration from Eudora/POP to Exchange, local documentation and support requirements, and the decommissioning on legacy messaging infrastructure.

As NASA continues to develop its Messaging Service, the Contractor shall remain cognizant of and committed to these requirements, adapting the local infrastructure as necessary to provide continued interoperability and support and advising the government of any local conflicts with the proposed Agency Messaging Service in a timely and well-documented fashion.

57.   GRC Desktop Seat and Service Model Variations – Master Contract Section E

In consideration for NASA GRC not selecting the SGI Architecture service level as a refresh option for refresh seat type , the Contractor shall provide the adjustment of existing SGI architecture system seat pricing by replacing SGI-High with SGI-Mid pricing, SGI-Mid with SGI-Entry pricing, and SGI-Entry pricing to remain the same as the existing pricing . The Government reserves the right to select any full seat type (other than SGI) as the hardware refresh type delivered at such time the seat is provided hardware refresh. (Please see GRC Attachment D, Table E-1, Summary of Seats and Service Levels for Computer Seats, for specific service levels.)

Section C. GRC Server Services

1 -11 RESERVED CORE
12-16 RESERVED (BLANK)

17. <u>GRC Archival Capability Service Description</u>

Archival data is hereby defined as: A copy of IT data retained for the purposes of compliance with NARA or NASA Records Retention rules, regulations, or policies, or in the event of a potential future need to re-access this data when it no longer remains on the system which originally produced it.

The following shall be the minimum capabilities, characteristics and performance elements of the Archival Service:

Each archival event shall be accompanied by an electronic data record which fully specifies (to the extent of the information provided by the data owner):

- Userid and full name of the data owner
- data owner organization and line supervisor
- date and time of archive creation
- title of data in the archive
- title of NASA program to which the archive pertains
- short description of the data in the archive
- size of the data archive on the long term storage media
- a unique archive event number comprised of the date/time stamp and other identifying information
- user proposed archive retention period (used for informational purposes only)

The electronic data records of the archival events on file shall be provided delivered to NASA management upon request in Microsoft Excel or other mutually agreed upon format, at period no more frequent than annually, except as provided for through ODIN ad hoc reporting procedures.

Any data stored within the Archival Service shall be available for restoration by data owner request through the ODIN Help Desk within 5 full working days. No requests for data restoration shall be accepted from persons other than the data owner of record unless specifically authorized by the Center IT Security Manager (CITSM). Repeated or frequent requests to restore data, in apparent violation of the definition of archival data (defined above) shall be brought to the attention of the ODIN DOCOTR for adjudication. Restoration of the data shall consist of providing temporary (5 working day) access to a copy of the data via online network file mount and instructions via electronic mail to the data owner for accessing the data. The temporary online copy of the data shall be deleted after 5 working days.
Users or organizations requiring greater archival storage volumes than defined for this service will procure additional storage through ODIN catalog purchases.
Continuous user subscription to the Archival Service level shall be required for the data owners of all archival events archival data retention. Archival data without appropriate subscription by a user or funding organization may be, at the sole discretion of the Contractor, deleted and/or removed from the system and the storage media reutilized, after 30 calendar days and electronic mail notification of the data owner and ODIN POC of the data owner organization. Data owners seeking to subsequently re-establish Archival Service after earlier discontinuation of the Archival Service level will require written DOCOTR approval.
At the Government's discretion, at the conclusion of the Delivery Order in which the Archival Service is implemented, the ownership of all components, materials, and data required for the